

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	US "20040160216"	US-PGPUB; USPAT	AND	ON	2006/10/17 13:41
S2	203	320/140	US-PGPUB; USPAT	AND	ON	2006/03/14 13:41
S3	25	S2 and electrochemical and cell	US-PGPUB; USPAT	AND	ON	2006/03/14 15:06
S5	203	320/140	US-PGPUB; USPAT	AND	ON	2006/03/14 15:07
S6	16	S5 and hydrogen	US-PGPUB; USPAT	AND	ON	2006/03/14 15:14
S7	4	S5 and converter adj module	US-PGPUB; USPAT	AND	ON	2006/03/14 15:17
S8	3	S5 and converter adj module and electrochemical	US-PGPUB; USPAT	AND	ON	2006/03/14 16:46
S9	203	320/140	US-PGPUB; USPAT	AND	ON	2006/03/14 16:52
S10	9	S9 and ((modul\$3 near3 converter) or (converter adj module))	US-PGPUB; USPAT	AND	ON	2006/03/14 18:11
S12	10108	"320"/.ccls.	US-PGPUB; USPAT	AND	ON	2006/03/14 18:11
S13	339	S12 and (electrochemical adj cell)	US-PGPUB; USPAT	AND	ON	2006/03/14 18:12
S14	1	S13 and (modular near3 power near3 converter)	US-PGPUB; USPAT	AND	ON	2006/03/14 18:14
S15	3	S13 and ((power near3 converter near3 module) or (interchangeable near3 converter) or (interchangeable near3 power near3 converter))	US-PGPUB; USPAT	AND	ON	2006/03/14 18:19
S16	81	Proton adj Energy adj Systems	US-PGPUB; USPAT	AND	ON	2006/03/14 18:19
S17	17	S16 and Speranza	US-PGPUB; USPAT	AND	ON	2006/03/14 18:20
S18	22	("20020058175"   "20020109410"   "20020117899"   "20020140293"   "20030072977"   "20030113595"   "4100051"   "4341607"   "5334463"   "5810284"   "5942811"   "5994793"   "6011324"   "6134124"   "6163088"   "6184593"   "6288456"   "6459231"   "6465910"   "6555989"   "6611068"   "6628011").PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/14 19:15

## EAST Search History

S19	680	(modular near3 converter) or plurality near3 (converter near3 module)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/14 19:17
S21	182	S19 and (electrochemical adj cell or battery)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/14 19:18
S22	37	("3596165"   "4293904"   "4443840"   "4459492"   "4533986"   "4648017"   "4761722"   "4841220"   "4853832"   "4855888"   "4860184"   "4931716"   "5006782"   "5063338"   "5179512"   "5274539"   "5434770"   "5436550"   "5448467"   "5491388"   "5514921"   "5530635"   "5594635"   "5615093"   "5631813"   "5768117"   "5991171"   "5999417"   "6069811"   "6154381"   "6198642"   "6222742"   "6310792"   "6330169"   "6381150"   "6583999"   "6650556").PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/14 20:34
S23	7	("5530635"   "5768117"   "5803215"   "5821755"   "5875104"   "5883797"   "5923549").PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/14 20:47
S24	19	("4092712"   "4833341"   "4947102"   "4994953"   "5045771"   "5253155"   "5267136"   "5272612"   "5278490"   "5414341"   "5438505"   "5512815"   "5530635"   "5583753"   "5592076"   "5610507"   "5627459"   "5659208"   "5705919").PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/14 20:49
S25	5	("4639834"   "5245527"   "6477965"   "6493227"   "6754066").PN. OR ("6867970"). URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 11:47

## EAST Search History

S26	30	("3621365"   "3653969"   "4104539"   "4384213"   "4441032"   "4472641"   "4670702"   "4677037"   "4839574"   "5156928"   "5290641"   "5360679"   "5462815"   "5625546"   "5637414"   "5642275"   "5646459"   "5712052"   "5725964"   "5853910"   "5858568"   "5885727"   "5945232"   "6030718"   "6218035"   "6219623").PN. OR ("6503649").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 12:31
S27	7	("5530635"   "5768117"   "5803215"   "5821755"   "5875104"   "5883797"   "5923549").PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 13:31
S28	14	("5530635"   "5768117"   "5803215"   "5821755"   "5875104"   "5883797"   "5923549").PN. OR ("6154381").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 13:31
S29	18	("3317809"   "3696286"   "3790816"   "3816804"   "4143282"   "4257090"   "4347474"   "4766364"   "4860188"   "4877972"   "4924170"   "4947310"   "5138249"   "5193054"   "5233287"   "5319536"   "5359280").PN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 15:21
S30	35	("3317809"   "3696286"   "3790816"   "3816804"   "4143282"   "4257090"   "4347474"   "4766364"   "4860188"   "4877972"   "4924170"   "4947310"   "5138249"   "5193054"   "5233287"   "5319536"   "5359280").PN. OR ("5602464").URPN.	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 17:08
S31	917	429/22	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 17:08
S32	600	429/23	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 17:08
S33	950	S31 or S32 and (dc51dc near2 converter)	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 17:09
S34	639	S33 and (converter adj module or unit)	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 17:11
S35	44	S34 and (power near2 electronics)	US-PGPUB; USPAT; USOCR	AND	ON	2006/03/15 17:11

## EAST Search History

S36	22	(US-20040223301-\$ or US-20040160215-\$ or US-20030214824-\$ or US-20030036806-\$).did. or (US-6353310-\$ or US-6650556-\$ or US-6154381-\$ or US-5883797-\$ or US-5530635-\$ or US-5875104-\$ or US-5768117-\$ or US-6828755-\$ or US-6503649-\$ or US-7006898-\$ or US-6858335-\$ or US-5642275-\$ or US-4472641-\$ or US-6166934-\$ or US-6023148-\$ or US-5673173-\$ or US-5602464-\$ or US-5319536-\$). did.	US-PGPUB; USPAT	AND	ON	2006/03/15 17:23
S37	22	S36 and (module or unit)	US-PGPUB; USPAT	AND	ON	2006/03/15 17:23
S39	3	S36 and (interchangeable or replaceable near3 (module or unit))	US-PGPUB; USPAT	AND	ON	2006/03/15 17:44
S40	22	(interchangeable or replaceable near3 (module or unit)) near3 ((power adj3 electronics) or (dc\$1dc adj converter) or power adj converter)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2006/03/15 18:52
S41	5	"6503649"	US-PGPUB; USPAT	AND	ON	2006/03/20 12:06
S42	1	"6503649".pn.	US-PGPUB; USPAT	AND	ON	2006/03/20 12:59
S43	203	320/140	US-PGPUB; USPAT	AND	ON	2006/03/20 12:59
S44	0	S43 and (modular adj dc\$1dc converter)	US-PGPUB; USPAT	AND	ON	2006/03/20 12:59
S45	34	(modular dc\$1dc converter)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:38
S46	16	S45 and (transformer and rectifier)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:00
S47	16	S46 and (chop or chopping or switched)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:00
S48	0	(modular dc\$1ac\$1dc converter)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:40
S49	0	(modular dc ac dc converter)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:40
S50	0	(modular dc ac dc converter)	US-PGPUB; USPAT	NEAR	ON	2006/03/20 13:41
S51	4858	(dc ac dc converter)	US-PGPUB; USPAT	NEAR	ON	2006/03/20 13:41

## EAST Search History

S52	91	(dc ac dc converter)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:41
S53	36	S52 and (transformer and rectifier)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:44
S54	28	S53 and (chop\$4 or switched or switching)	US-PGPUB; USPAT	ADJ	ON	2006/03/20 13:44
S55	3	"6503645"	US-PGPUB; USPAT	AND	ON	2006/10/17 13:41
S56	6	"6503649"	US-PGPUB; USPAT	AND	ON	2006/10/17 13:44
S57	1	"6503649".pn.	US-PGPUB; USPAT	AND	ON	2006/10/17 13:41
S58	28	(US-20040223301-\$ or US-20030214824-\$ or US-20040140718-\$ or US-20020071290-\$ or US-20040160216-\$ or US-20030036806-\$).did. or (US-6023148-\$ or US-5875104-\$ or US-6503649-\$ or US-4472641-\$ or US-5319536-\$ or US-5530635-\$ or US-7006898-\$ or US-5883797-\$ or US-6353310-\$ or US-5008797-\$ or US-5602464-\$ or US-6166934-\$ or US-5673173-\$ or US-5642275-\$ or US-6704213-\$ or US-6858335-\$ or US-6650556-\$ or US-6828755-\$ or US-6154381-\$ or US-5768117-\$). did. or (US-5006797-\$ or US-4233000-\$).did.	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/20 16:16
S59	27	S58 and (converter)	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/20 16:16
S60	2	S59 and (motherboard or mother adj board)	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/20 16:17
S61	1	S60 and (expand\$4 with (motherboard or mother adj board))	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/20 16:30
S65	15586	"320"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 16:33

## EAST Search History

S66	32459	"363"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 16:32
S67	29748	"323"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 16:32
S68	73431	S65 or S66 or S67	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 16:33
S71	0	S68 and (convert\$r and expand\$5 and (motherboard or mother adj board)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 16:36
S72	0	S68 and (convert\$r expand\$5 (motherboard or mother adj board))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:43
S73	2942	S68 and (convert\$r expand\$5 (motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:50
S74	383	S68 and (convert\$r expand\$5 (motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board))).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:51

## EAST Search History

S75	16	S74 and ((ac adj dc) near convert\$r)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:51
S76	0	S74 and (module with (ac adj dc) near convert\$r)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:52
S77	1	S74 and ((modul\$2 or unit or cartridge or cartridge or magazine or cassette) with (ac adj dc) near convert\$r)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:56
S78	20888	S68 and (convert\$r)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:56
S80	3119	S78 and (modular or module)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 16:58
S81	642	S80 and ((motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 17:01
S82	1	S81 and (expand\$5 near ((motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board)) near (modul\$2 or unit or cartridge or cartridge or magazine or cassette) with convert\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 17:04

## EAST Search History

S83	1	S81 and (expand\$5 near ((motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board)) with (modul\$2 or unit or cartridge or cartridge or magazine or cassette) same convert\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 17:04
S84	1	S81 and (expand\$5 with ((motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board)) same (modul\$2 or unit or cartridge or cartridge or magazine or cassette) same convert\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 17:05
S85	1	S81 and (expand\$5 same ((motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board)) same (modul\$2 or unit or cartridge or cartridge or magazine or cassette) and convert\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 17:05
S86	78	S81 and ((expand\$5 or increas\$3 or add or chang\$3 or adjust\$4) same ((motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board)) same (modul\$2 or unit or cartridge or cartridge or magazine or cassette) and convert\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 17:44
S87	11	S86 and ((ac adj dc) near convert\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 18:03
S90	38	("3333872"   "4547961"   "4873757"   "5036428"   "5526234"   "5576931"   "5581443"   "5635110").PN. OR ("5973923").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/05/20 20:05
S91	0	(expandable (mother adj board) modul\$6 ("3" or three) with phase) AC adj DC power converter adjust\$4 output)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/20 20:08



## EAST Search History

S92	0	(expandable (mother adj board) modul\$6 ("3" or three) with phase) AC adj DC power converter adjust\$4 output)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/20 20:08
S93	0	(expandable (mother adj board) modul\$6 ("3" or three) with phase) AC adj DC power converter adjust\$4 output)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/20 20:08
S94	0	(expand\$5 (mother adj board) modul\$6 ("3" or three) with phase) ((AC adj DC) near converter) adjust\$4 output)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/20 20:09
S96	15586	"320"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 20:17
S97	32459	"363"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 20:17
S98	29748	"323"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 20:17
S99	73431	S96 or S97 or S98	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/20 20:17

## EAST Search History

S10 0	391	S99 and ((expand\$5 or expansion or add or increas\$4) (mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board)) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter) (adjust\$4 or vary\$4 or chang\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 14:20
S10 1	43	S99 and ((expand\$5 or expansion or add or increas\$4) (mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board)) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter) (adjust\$4 or vary\$4 or chang\$4)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/20 20:18
S10 2	24	("2995686"   "4998180"   "5045642"   "5059557"   "5306874"   "5315482"   "5455742"   "5484965"   "5616888"   "5629839"   "5641944"   "5648892"   "5670749"   "5754411").PN. OR ("5907475").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/05/20 22:35
S10 4	15586	"320"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 14:20
S10 5	32459	"363"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 14:20
S10 6	29748	"323"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 14:20

## EAST Search History

S10 7	73431	S104 or S105 or S106	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 14:20
S10 8	392	S107 and ((expand\$5 or expansion or add or increas\$4) (mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board)) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter) (adjust\$4 or vary\$4 or chang\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 14:24
S10 9	391	S107 and ((expand\$5 or expansion or add or increas\$4) (mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board)) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter) (adjust\$4 or vary\$4 or chang\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 14:21
S11 0	1	S108 NOT S109	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 14:22
S11 1	395	S107 and ((expand\$5 or expansion or add or increas\$4) (mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board)) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter) (adjust\$4 or vary\$4 or chang\$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 14:28
S11 3	3	S111 NOT (S108 or S109)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 14:27

## EAST Search History

S11 4	396	S107 and ((expand\$5 or expansion or add or increas\$4) (mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board))) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 14:31
S11 5	1	S114 NOT (S109 or S110 or S113)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 14:29
S12 3	0	((expandable or expansion) ((mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board))) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 16:56
S12 4	1	((expandable or expansion) with ((mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board))) and (modul\$6 (("3" or three) with phase) ((AC adj DC) near converter)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 16:57
S12 6	1	((expand\$5 or expansion) same ((mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board))) and (modul\$6 (("3" or three) with phase) ((AC adj DC) near converter)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 16:58
S12 7	1	((expand\$5 or expansion) same ((mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) with (card or board))) and (modul\$6 (("3" or three) with phase) ((AC adj DC) with converter)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 16:59

## EAST Search History

S12 8	2	((expand\$5 or expansion) same ((mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) same (card or board))) and (modul\$6 (("3" or three) same phase) ((AC adj DC) with converter)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 17:00
S12 9	123071	"320"/\$.ccls. or "323"/\$.ccls. or "363"/\$.ccls. or "307"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	SAME	ON	2007/05/21 17:01
S13 2	0	S129 and (expandable board modul\$6 ((AC adj DC) with convert\$3)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 17:04
S13 3	0	S129 and (expand\$4 board modul\$6 ((AC adj DC) with convert\$3)).AB.	US-PGPUB; USPAT; USOCR; FFKS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 17:04
S13 5	0	S129 and ((expand\$4 or scalab\$5 or upgrad\$5 or expansion) (board or card or substrate or hostboard or motherboard or (power adj substrate) or (mother adj board)) (modul\$6 with ((AC adj DC) with convert\$3))).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 17:10
S13 6	1	S129 and ((expand\$4 or scalab\$5 or upgrad\$5 or expansion) (board or card or substrate or hostboard or motherboard or (power adj substrate) or (mother adj board)) (modul\$6 with ((AC adj DC) with convert\$3) or rectifier)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 17:13
S13 7	24	((expand\$4 or scalab\$5 or upgrad\$5 or expansion) (board or card or substrate or hostboard or motherboard or (power adj substrate) or (mother adj board)) (modul\$6 with ((AC adj DC) with convert\$3) or rectifier)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 17:49

## EAST Search History

S13 8	63	((expand\$4 or scalab\$5 or upgrad\$5 or expansion) (board or card or substrate or hostboard or motherboard or (power adj substrate) or (mother adj board) or (circuit adj card) or (printed adj circuit)) modul\$6 with (converer or (power adj supply))).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 19:51
S13 9	8	S138 and (converter or (power adj supply) with ((AC and DC) near input))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:04
S14 0	63	S138 and (converter or (power adj supply))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 19:56
S14 1	0	S140 and (converter with (AC and DC) near input)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 19:56
S14 2	0	S140 and (converter with (AC and DC))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 19:57
S14 3	0	S140 and (converter same (AC and DC))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 19:57
S14 4	0	S138 and (converter same (AC and DC))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 19:57

## EAST Search History

S14 5	197	((three or "3") near (phase or line or wire) ((AC adj1 DC) near converter)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:22
S14 6	15	S145 and ((DC adj1 DC) near converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:07
S14 7	21	S145 and ((DC adj2 DC) near converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:07
S14 8	42	S145 and ((DC adj3 DC) near converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:07
S14 9	55	S145 and ((DC adj4 DC) near converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:07
S15 0	7	S146 and (modul\$2 or modularized or unit or unitized or cartridge or cartridge or magazine or cassette or pack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:20
S15 1	0	S150 and (motherboard or backplane or (mother or daughter or circuit or PC or main or printed or host or electronics or power or base or wiring) near (card or board or substrate or wiring) or baseboard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:12

## EAST Search History

S15 2	15	S149 and (modul\$2 or modularized or unit or unitized or cartridge or cartridge or magazine or cassette or pack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:23
S15 3	0	S152 and (motherboard or backplane or (mother or daughter or circuit or PC or main or printed or host or electronics or power or base or wiring) near (card or board or substrate or wiring) or baseboard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:23
S15 4	8	S152 NOT S150	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:20
S15 5	249	((three or "3") near (phase or line or wire) ((AC adj4 DC) near converter)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:24
S15 6	60	S155 and (modul\$2 or modularized or unit or unitized or cartridge or cartridge or magazine or cassette or pack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:24
S15 7	0	S156 and (motherboard or backplane or (mother or daughter or circuit or PC or main or printed or host or electronics or power or base or wiring) near (card or board or substrate or wiring) or baseboard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:24
S15 8	3761	((AC adj4 DC) near converter).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:24



## EAST Search History

S15 9	1104	S158 and (modul\$2 or modularized or unit or unitized or cartridge or cartridge or magazine or cassette or pack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:24
S16 0	77	S159 and (motherboard or backplane or (mother or daughter or circuit or PC or main or printed or host or electronics or power or base or wiring) near (card or board or substrate or wiring) or baseboard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:25
S16 1	16	S160 and (expand\$4 or scalab\$5 or upgrad\$5 or expansion or slot)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:28
S16 2	0	S155 and (expandable power supply)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 20:28
S16 3	0	S155 and (expandable power supply)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:29
S16 4	0	S155 and ((expand\$4 or scalab\$5 or upgrad\$5 or expansion) power supply)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:29
S16 5	6686	((expand\$4 or scalab\$5 or upgrad\$5 or expansion) power supply)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:30

## EAST Search History

S16 6	96	S165 and ((AC adj4 DC) near converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:30
S16 7	67	S166 and ((DC adj4 DC) near converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:30
S16 8	65	S167 and (modul\$2 or modularized or unit or unitized or cartridge or cartridge or magazine or cassette or pack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:31
S16 9	43	S168 and (motherboard or backplane or (mother or daughter or circuit or PC or main or printed or host or electronics or power or base or wiring) near (card or board or substrate or wiring) or baseboard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:47
S17 0	2	S169 and (((three or "3") near phase) (UPS or uninterruptible near power))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:53
S17 1	18876	((expand\$5 or expansion or scalab\$5 or upgradab\$5) (UPS or (uninterruptible near power))).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:54
S17 2	0	S171 and ((three or "3") near (phase or line or wire) ((AC adj4 DC) near converter)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:55

## EAST Search History

S17 3	0	S171 and ((three or "3") near (phase or line or wire) ((AC adj4 DC) near converter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 20:55
S17 4	0	S171 and ((three or "3") near (phase or line or wire) ((AC adj4 DC) near converter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:57
S17 5	0	S171 and ((three or "3") near (phase or line or wire or input) ((AC adj4 DC) near converter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:57
S17 6	21	S171 and ((three or "3") near (phase or line or wire or input) converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 21:00
S17 7	1	S171 and ((three or "3") near (phase or line or wire or input) converter).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	AND	ON	2007/05/21 20:58
S17 8	293	(AC power converter).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:01
S17 9	58	S178 and (three near phase)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:04

## EAST Search History

S18 0	9	S179 and ((DC adj4 DC) near converter)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:06
S18 1	27	S179 and (modul\$2 or modularized or unit or unitized or cartridge or cartridge or magazine or cassette or pack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:06
S18 2	0	S181 and (motherboard or backplane or (mother or daughter or circuit or PC or main or printed or host or electronics or power or base or wiring) near (card or board or substrate or wiring) or baseboard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:07
S18 3	15586	"320"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S18 4	32459	"363"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S18 5	29748	"323"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S18 6	73431	S183 or S184 or S185	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12

## EAST Search History

S187	0	S186 and (convert\$r and expand\$5 and (motherboard or mother adj board)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S188	383	S186 and (convert\$r expand\$5 (motherboard or (mother adj board)) or ((circuit or PC or main) adj (card or board))).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 21:12
S189	15586	"320"/\$.ccls.	US-PGPUB; USPAT; USCCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S190	32459	"363"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S191	29748	"323"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S192	73431	S189 or S190 or S191	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:12
S193	43	S192 and ((expand\$5 or expansion or add or increas\$4) (mother adj board) or motherboard or backplane or ((circuit or PC or main or printed or host) near (card or board)) modul\$6 (("3" or three) with phase) ((AC adj DC) near converter) (adjust\$4 or vary\$4 or chang\$4)).AB.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:12

## EAST Search History

S19 4	19916	(S188 or S187 OR S193 or S132 or S136 or S137 or S138 or S145 or S155 or S171 or S178)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/21 21:15
S19 6	0	S194 and (modular expandable UPS)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:15
S19 7	5	S194 and (modular expandable UPS)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 21:18
S19 8	1131	S194 and ((modul\$2 or modularized or unit or unitized or cartridge or cartridge or magazine or cassette or pack) (expand\$5 or expansion or scalab\$5 or upgradab\$5) (UPS or uninterruptible near power))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 21:21
S19 9	0	S198 and (three phase ((AC adj4 DC) near converter))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 21:20
S20 0	0	S198 and ((three or single or multi or plural) phase ((AC adj4 DC) near converter))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 21:20
S20 1	62	S198 and (motherboard or backplane or (mother or daughter or circuit or PC or main or printed or host or electronics or power or base or wiring) near (card or board or substrate or wiring) or baseboard)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	WITH	ON	2007/05/21 21:24
S20 3	0	S194 and (modular converter).AB.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:25

## EAST Search History

S20 4	3	S194 and (modular converter)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2007/05/21 21:25
S20 5	25	("4908738"   "5418688"   "5497291"   "5579217"   "5761050"   "5812387"   "5825633"   "D340907").PN. OR ("5933343"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/05/21 21:29
S20 9	57	(US-20040223301-\$ or US-20030214824-\$ or US-20040140718-\$ or US-20020071290-\$ or US-20040160216-\$ or US-20030036806-\$ or US-20030112647-\$ or US-20020101752-\$ or US-20010033502-\$ or US-20010002102-\$ or US-20030133319-\$ or US-20020085399-\$ or US-20030146734-\$ or US-20030030748-\$ or US-20010011845-\$).did. or (US-6023148-\$ or US-5875104-\$ or US-6503649-\$ or US-4472641-\$ or US-5319536-\$ or US-5530635-\$ or US-7006898-\$ or US-5883797-\$ or US-6353310-\$ or US-5008797-\$ or US-5602464-\$ or US-6166934-\$ or US-5673173-\$ or US-5642275-\$ or US-6701213-\$ or US-6858335-\$ or US-6650556-\$ or US-6828755-\$ or US-6154381-\$ or US-5768117-\$ or US-6970367-\$ or US-6700351-\$ or US-5973023-\$ or US-5929618-\$ or US-5917719-\$ or US-6865682-\$). did. or (US-6317345-\$ or US-5945746-\$ or US-5907475-\$ or US-5289363-\$ or US-6046021-\$ or US-5930112-\$ or US-5119286-\$ or US-5677831-\$ or US-6897677-\$ or US-4401351-\$ or US-1367448-\$ or US-5003453-\$ or US-5933343-\$). did. or (US-5007797-\$ or US-4235700-\$ or JP-2005293572-\$).d.d.	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/22 20:04
S21 0	11	S202 and (fuel adj cell)	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/23 13:11

## EAST Search History

S21 1	10	S210 and (converter)	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/22 20:50
S21 2	1	S210 and ((AC adj DC) near converter)	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/22 20:05
S21 3	1	S210 and ((AC adj4 DC) near converter)	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/22 20:05
S22 2	57	(US-20040223301-\$ or US-20030214824-\$ or US-20040140713-\$ or US-20020071290-\$ or US-20040160216-\$ or US-20030036806-\$ or US-20030112647-\$ or US-20020101752-\$ or US-20010033502-\$ or US-20010002102-\$ or US-20030133319-\$ or US-20020085399-\$ or US-20030146734-\$ or US-20030030743-\$ or US-20010011845-\$).did. or (US-5023148-\$ or US-5875104-\$ or US-6503649-\$ or US-4472641-\$ or US-5319536-\$ or US-5530635-\$ or US-7006858-\$ or US-5883797-\$ or US-6353310-\$ or US-5008797-\$ or US-5502454-\$ or US-6166934-\$ or US-5573173-\$ or US-5642275-\$ or US-6704213-\$ or US-6858335-\$ or US-6550556-\$ or US-6828755-\$ or US-6154381-\$ or US-5768117-\$ or US-6970367-\$ or US-6700351-\$ or US-5973513-\$ or US-5929618-\$ or US-5017710-\$ or US-6865682-\$). did. or (US-6317345-\$ or US-5945746-\$ or US-5907475-\$ or US-5385363-\$ or US-6046521-\$ or US-5030112-\$ or US-5119286-\$ or US-5677531-\$ or US-6897677-\$ or US-4401351-\$ or US-5367448-\$ or US-5003453-\$ or US-5933343-\$). did. or (US-5008717-\$ or US-4135000-\$ or JP-2005295672-\$).did.	US-PGPUB; USPAT; DERWENT	OR	ON	2007/05/23 13:40
S22 3	18	S222 and ((dual near (source or supply)) or ((AC and DC) near (input or source or supply)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/23 13:41